Table 16.1 Internal Auditor's Worksheet Conformance Nonconformance Circle one: **Auditors Worksheet** (1) Documentation of Biosolids BMP Ol-2016-01 Audit Number: Element No. Dave Harris (Wastewater O&M Supervisor) Provide lead auditor first followed by auditor assistants along with classifications 2/27/16 Audit date(s) List nonconformances: 1. 2. 3. 4. 5. 6. 7. Comments: Element #1 has been audited and is effective. "I have conducted an internal audit of the BMP element noted above." Lead Auditor (MM/DD/YYYY)\_02\_/\_27\_/\_2016\_ signature:\_ Joint review with BMP coordinator: (MM/DD/YYYY) 3/3/

Element 16 - Internal EMS Audit.2016.docx

Table 16.1.1 - Internal Auditor's Minimum Question Checklist

Table 10.1.1 – Internal Auditor's Minimum Question Checklist		A
Element 1 Documentation of BMP	Record audit number from worksheet:	01-2016-01
Requirement	Questions/Considerations	Auditor Notes
Document the BMP for Biosolids in an BMP Manual or equivalent set of	Can you show me your BMP manual?	Yes. All the elements making up the BMP are located on the City ESD Sharepoint site at mygrcity.us and are available
program documents that describe, at least at a general level, the applicable		to all City employees. It is also available public view at the City of Grand Rapids public website at
policies, programs, plans, procedures, and management practices in the	· ·	http://grcity.us/enterprise-services/Environment-Services/Pages/Biosolids-BMP.aspx
BMP.		
Approve the BMP Manual by a level of the organization's management with	Has your BMP manual been approved by the department Director?	Yes, by the ESD Manager.
the authority to commit people and resources to biosolids management	and the second approved by the department Briefler.	Tes, of the 252 Manager.
activities.		
Contain, in the BMP Manual, the organization's Biosolids Management	0 1 5 11 14	
	Can you show me your Biosolids Management Policy? Can you	Element 2 consists of the Biosolids Management Policy. Yes. Table 1.1 is located on page 3 of element 1.
Policy and BMP Procedures required by the BMP Elements.	show me the elements of your policy identified in Table 1.1 of your	
	BMP manual?	
Contain or cross-reference, in the BMP Manual, public participation,	Can you show me some examples of how you have cross referenced	Yes. Element 6 is cross referenced with elements 2,5, 7 and 12.
communications, and emergency preparedness and response programs and	public participation in your manual?	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
plans required by the BMP Elements.	Can you show me some examples of how you have cross referenced	Yes. Element 9 is cross referenced with elements 6 and 7.
	communications in your manual?	
	Can you show me some examples of how you have cross referenced	Yes. Element 11 refers to element 12 and the spill plan SOP 1114 for Biosolids spill containment.
	emergency preparedness and response programs and plans in your	168. Element 11 felets to element 12 and the spin plan 507 1114 for Blosofius spin contamment.
·	manual?	
Cover in the DMD Menual all amplicable actions and a 1 of 1 of 1		Y. Fland C. L. C. L. C. L.
Cover, in the BMP Manual, all applicable, relevant, and selected critical	Were Critical Control Points, as identified in the Manual of Good	Yes. Element 3 consists of the critical control points related to the Biosolids value chain.
control points for biosolids management activities throughout the biosolids	Practice - Appendix F, for biosolids management activities	
value chain.	throughout the biosolids value chain considered during program	·
	development?	
In the BMP Manual, include or cross-reference all operational controls,	Can you provide examples showing how operational controls,	Yes. Elements 3, 4 and 10 discuss operational controls and procedures related ti legal requirements of element 4.
procedures, processes, and other management methods used to achieve and	procedures, processes, and other management methods used to	
maintain compliance with legal and other requirements.	achieve and maintain compliance with legal and other requirements	
1	are cross referenced in the BMP manual?	
In the BMP Manual, describe those biosolids management activities assigned	Does the BMP manual state which Biosolids management activities	Yes. Table 7.1 addresses this in roles and responsibilities of element 7.
to and performed by contractors.	are assigned to contractors?	163. Table 7.1 addresses this in roles and responsionates of element 7.
to and performed by contractors.	are assigned to contractors;	
Out it is a partial of the same	7 1 77 77 1	V. Cl. Market
Contain in the BMP Manual must be documentation of support for the NBP	Does the BMP Manual contain documentation of support for the	Yes. The NBP letter of understanding is located on page 5 of element 1 (Letter of understanding).
letter of understanding.	NBP letter of understanding?	
Accurately describe the process used by the facility to handle solids.	Have fundamental changes been made to the solids handling process	Yes. Changes have been made in the past; However, no changes have been made since the last internal audie except for
·	that need to be reflected in the process description in this Element?	revision numbers of elements and SOP's.
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Table 16 1 Internal Auditor's Worksheet

Auditors Worksheet	Circle one: Conform	mance Nonconformance	
Element No.	(2) Biosolids Management Policy	Audit Number:	12016-02 12-2016-0
Provide lead auditor first followed by auditor assistants along with classifications	Dave Harris (Wastewater O&M Supervisor)		
Audit date(s)	2/27/16		
nonconformances:			
	•		
nments: Element #2 has been audited and req	uirements have been met.		
minorial Element #2 has been dualed and req			
•			

Joint review with BMP coordinator: (MM/DD/YYYY) 3/3/14 Initials: Element 16 - Internal EMS Audit.2016.docx Page 4 of 22

Table 16.1.2 - Internal Auditor's Minimum Question Checklist

Table 16.1.2 – Internal Auditor's Minimum Question Checklist		
Element 2 Biosolids Management Policy	Record audit number from worksheet:	07-701P-01
Requirement	Questions/Considerations	Auditor Notes
Establish a Biosolids Management Policy that commits the organization to	Does the BMP commit our organization to the "Code of Good	Upholding the principles of The National Biosolids Code of Good Practice is listed in element 2 by our mssion
following the principles of conduct set forth in the Code of Good Practice	Practice"?	statement, objectives and procedures.
and may include other biosolids commitments the organization voluntarily		, -, -, -, -, -, -, -, -, -, -, -, -, -,
chooses to adopt.		
Communicate the policy to employees, contractors, and all interested parties.	Can you show me how the biosolids management policy was communicated to employees, contractors, and interested parties?	Yes. Element 8 addresses training. Training is kept on file by the BMP Coordinator for contractors and ESD City employees. Annual BMP refresher and awareness training for new employees and contractor employees is also kept on a spreadsheet on the ESD City Sharepoint site in the BMP under training.
Incorporate the policy into the organization's biosolids programs, procedures, and practices.	Can you show me some examples of how the biosolids management policy has been incorporated into programs, procedures, and practices?	There are SOP's tied to CCP's in element 3; Goals in element 5; and Emergency response information in element 11. In addition, the contractor Cordes has an emergency spill plan.
Maintain a pretreatment program consistent with state and federal	Can you show an SOP used to insure compliance with a state or	Yes. SOP 3606 is tied to GVRBA SOP #12 (Odor Minimization Plan – GVRBA Facilities) with regard to the carbon
regulations identified in the NPDES permit.	federal regulation?	odor control units at GVRBA and the air quality permit regulations.
Monitor mercury in the plant influent and effluent and maintain existing pollutant minimization plan (PMP) practices and procedures identified in the NPDES permit.	Can you show me results from your mercury monitoring of the plant influent or effluent?	Yes. The IPP annual report 2015 in the ESD (T-Drive) under IPP – Annual Reports. The report is in draft as of the day of audit. It is located in the correct location and last edited 2/22/16. It will be finalized by Kurt Anderson in IPP.
Develop contract dewatering specifications and contracts which emphasize product handling and final disposal.	Can you show me language in your dewatering specifications which emphasizes product handling and final disposal?	Yes. This information is located on the GVRBA Sharepoint site in the GVRBA Joint Operating Agreement. The City of Grand Rapids WRRF was initially contracted to perform the dewatering. Since that time, the GVRBA board has not asked that it be rebid. Grand Rapids staff continues to maintain dewatering operations. Supplemental GVRBA landfill, polymer and logistics contracts are kept on the GVRBA Sharepoint site and also in the WRRF front office GVRBA files.

Table 16.1 Internal Auditor's Worksheet Conformance **Auditors Worksheet** Circle one: Nonconformance (3) Critical Control Points Audit Number: Element No. Dave Harris (Wastewater O&M Supervisor) Provide lead auditor first followed by auditor assistants along with classifications 2/27/16 Audit date(s) List nonconformances: 1. 2. 3. 4. 5. 6. 7. Comments: Element #3 has been audited. SOP's 3350 and 3351 related to WAS thickening are listed, but have not been made into SOP's to replace the previous WAS thickening centrifuge SOP's. Templates have been set up, but no procedure for optimization or start and stop procedures have been implemented. In addition, the CCP Compost Facility of Landfill(s) portion states "composting contract / agreement). There is currently no composting agreement; even though the GR WRRF has kept composting in its BMP program. Opportunity for improvement to reword this part of element 3 to "possible future composting contract / agreement"; until there is an actual agreement (if composting were to become an option for us again in the future).

"I have conducted an internal audit of the BMP element nated above." Lead Auditor (MM/DD/YYYY)\_02\_/\_27\_/\_2016\_ signature:\_

Joint review with BMP coordinator: (MM/DD/YYYY)  $\frac{2}{3}$ Element 16 - Internal EMS Audit.2016.docx

Table 16.1.3 - Internal Auditor's Minimum Question Checklist

Table 10.1.5 – Internal Auditor's William Question Checkrist		A.
Element 3 Critical Control Points	Record audit number from worksheet:	03-2016-01
Requirement	Questions/Considerations	Auditor Notes
Identify and document the critical control points of the organization's	Was Appendix F in the Manual of Good Practice considered when	Yes, in table 3.1 in element 3.
biosolids management activities throughout the biosolids value chain,	identifying your critical control points?	
consistent with those identified in the National Manual of Good Practice and	Were all critical control points identified in Appendix F which were	Yes. Appendix F with regards to the Biosolids Value Chain, WW collection and pretreatment, WW treatment, solids
other authoritative sources.	applicable to our operation implemented in our BMP?	generation and solids storage and transportation were identified in our BMP.
Identify potential or actual environmental impacts at each critical control	Have potential or actual environmental impacts for each critical	Yes. Environmenal impacts have been addressed in element 3.
	riave potential or actual environmental impacts for each critical	
point.	control point been identified?	Yes. The list is complete.
	Is the list complete?	
Keep up-to-date information on the organization's critical control points.	Is up to date information maintained on Critical Control Points?	Yes, However, there is no WAS thickening start up or shut down procedure. In addition, there is no SOP mentioned for
		optimization of the WAS thickening process that has been online since 9/11/14.
Maintain records that link each critical control point and its potential	Are records maintained which link critical control points,	Yes. Monitoring and measurement. An example would be Primary Treatment. The gallon volume of priary solids
environmental impacts with the corresponding operational controls.	environmental impacts, and operational controls?	pumped daily is recorded as are the solids blanket levels in each primary clarifier. Solids concentration of the primary
environmental impacis with the corresponding operational controls.	environmental impacts, and operational controls?	pumped daily is recorded as are the solids blanket levels in each primary clarifier. Solids concentration of the primary
		solids are run by the laboratory three times per week also.
For organizations that have successfully completed a third party verification	Have you had any operational changes that required a change to the	Yes. The Thickened Waste project was completed (with punch list items from the project) in 2015. While the process
audit, provide notification to the NBP (and assigned third-party verification	identified critical control points or environmental impacts associated	was started and tested in late 2014; the project was not finalized until early 2015. Composting continues to be kept in
auditor) following any operational change that requires a change to the	with the critical control points?	our BMP as it was once used. This beneficial reuse may return to the GVRBA and the City of Grand Rapids at a future
identified critical control points or environmental impacts associated with	•	date. It was decided to keep it in our BMP.
the critical control points.		·
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Table 16.1 Internal Auditor's Worksheet

Auditors Worksheet	ing a second of the second	Circle one: (Conform	ance) Nonconforn		
Element No.	(4) Legal & Other Re	equirements	Audit Number	:	04-2016-01
Provide lead auditor first followed by auditor assistants along with classifications	Dave Harris (Wastewater C	0&M Supervisor)			
Audit date(s)	2/28/16				
nonconformances:					
mments: Requirements for Element 4 have been	n met.				

"I have conducted an internal audit of the BMP element noted above." 

Table 16.1.4 - Internal Auditor's Minimum Question Checklist

Element 4 - Legal and Other Requirements	Record audit number from worksheet:	04-2016-01
Requirement	Questions/Considerations	Auditor Notes
Establish a procedure for identifying and tracking legal (federal, state, and	Is a procedure in place for tracking changes in legal and other	Yes. Element 4 (figure 4.1). This is addressed as an annual requiarement to review all 12 items under regulations and
local) and other requirements applicable to its biosolids management	requirements?	guidance.
activities.		Element 7.2 also addresses this in roles and responsibilities.
Establish and maintain records of applicable legal and other requirements.	Are records of legal and other requirements maintained?	Yes. They are maintained in table 4.1
20000101 una mantanti rovordo or appriodoro robar ana omor roquiromono.	Is the list complete?	Previous reviews of legal and other requirements are kept in the BMP file.
	is no not complete:	Yes. The list is complete.
Include a management process for incorporating changes and new	Is a process in place for incorporating changes and new requirements	Yes. Figure 4.1 document review.
requirements into the elements of the BMP.	into the BMP manual?	
A TOTAL CONTROL OF THE PARTY.		
CT C1: 111 :11	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Yes. Legal requirements review from calendar year 2015 states the sources that were checked for changes.
The City will utilize a variety of sources for identifying, tracking, analyzing,	Can you document that you have monitored the National Biosolids	res. Legal requirements review from calendar year 2013 states the sources that were checked for changes.
and interpreting the various legal and other requirements which impact the	Partnership website for information which may have impacted your	
Biosolids value chain.	program?	
On an annual basis, internal BMP team members will review Table 4.1 and	Show your latest annual review forms.	Yes. The most current review forms are in the BMP files in the BMP Coordinator's office.
submit an "Annual Legal and Other Requirements Document Review" form		
to the BMP coordinator.		
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Table 16.1 Internal Auditor's Worksheet

Auditors Worksheet	Circle one: Confo	ormance Nonconformance	
Element No.	(5) Goals and Objectives	Audit Number:	05-2016-01
Provide lead auditor first followed by auditor assistants along with classifications			
Audit date(s)	3/18/16		

## List nonconformances:

- 1. Element 5 states that goals will be set and assigned during the last quarter of the calendar year.
- 2. No goals have been set yet for 2016. SMART forms, action plans and action plan worksheets have not been made.
- 3. Element 5 is in draft form and is not published as a major version.
- 4. Goals and objectives are not listed in table 5.1. If not here, then an appendix must be generated and reference in element 5 for the goals and objectives for the current year.

5.

6.

Comments: Note: Element 5 is in version 10.1 and is not published for all users to see the current (non draft version). Sharepoint work flow is not working correctly. Version needs to have forced approval to show most recent major version. Also, goals and objectives have not been set up for calendar year 2016. Table 13.2 (Action plan), Figure 5.1 (goals and objectives annual review) as well as SMART form 5.3 have not been filled out for any goals for calendar year 2016. The BMP Coordinator mentioned not setting goals for this year until having the management review with the ESD Manager. Element 5 specifically states that the internal team will identify new goals and objectives. Element 5 would need to be modified and changed in order to do this. Currently, we are in nonconformance. Nonconformances 2016-01 and 2016-02 were generated as a result of this audit.

"I have conducted an internal audit of the BMP element noted above." Lead Auditor (MM/DD/YYYY)\_03\_/\_18\_/\_2016\_ signature:\_

Joint review with BMP coordinator: (MM/DD/YYYY)  $\frac{3}{2}$ 

Element 16 - Internal EMS Audit.2016

Table 16.1.5 - Internal Auditor's Minimum Question Checklist

Table 16.1.5 – Internal Auditor's Minimum Question Checklist		07.001/.01
Element 5 Goals and Objectives	Record audit number from worksheet:	05-2016-01
Requirement	Questions/Considerations	Auditor Notes
Establish and periodically review measurable biosolids program goals and objectives for biosolids management activities.	Are goals and objectives established? Are goals and objectives periodically reviewed? Do they support the four NBP outcome areas?	Goals for 2015 were established. However, goals for 2016 were not established in the last quarter of calendar year 2015 for 2016 goals. Nonconformance 2016-01 and 2016-02 were constructed to address discrepancies.
Reflect, in program goals and objectives, identified priorities for improving environmental performance of biosolids management activities based on critical control points, identified or potential environmental impacts, legal and other requirements, and applicable best management practices as defined in the National Manual of Good Practice and various authoritative sources on biosolids management (e.g., Water Environment Federation Manuals of Practice).	Do the goals and objectives identified in table 5.1 reflect a commitment on the part of the City to improving the environment or biosolids quality?	Yes. Proposed goals reflect our commitment to improving the environment and Biosolids quality.
Consider, in developing program goals and objectives, input from interested parties developed through proactive public participation.	Is there evidence that input from interested parties was considered in developing goals and objectives?	Yes. Form 5.2 was sent to interested parties for feedback and suggestions.
Integrate goals and objectives with other elements of the BMP and biosolids management activities.	Are goals and objectives integrated with other elements of the BMP?	Yes. Goals are integrated as a part of the performance report and management review (elements 15 and 17). They are also part of public participation in planning and public outreach (elements 6 and 9 respecitvely).
Develop program goals and objectives using SMART criteria (I.e., be Specific, Measurable, Achievable, Relevant, and Time-bounded).	Is there evidence that a SMART criterion was used to select goals and objectives?  Does each goal and objective meet SMART criteria requirements?	SMART form 5.3 was implemented into our BMP based on previous audits and nonconformances. This form assures our goals meet the criteria related to Biosolids and the critical control points.
Update program goals and objectives on a regular basis.	Are goals and objectives regularly updated?	When goals have been tracked previously, all required monitoring and measurement has been performed. Goal reporting for year 2015 was done on time.
Establish an action plan that describes those improvement activities it is pursuing to achieve biosolids program goals and objectives. Designate, in the action plan, schedules, milestones, resources, and responsibilities for achieving biosolids program goals and objectives.	Are action plans in place for each goal?  Does each action plan contain schedules, milestones, resources, and responsibilities to achieve the objectives?	Yes. All action plans contained this data.
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Table 16.1 Internal Auditor's Worksheet Conformance Nonconformance **Auditors Worksheet** Circle one: 06-2016-01 (6) Public Participation in Planning **Audit Number:** Element No. Dave Harris (Wastewater O&M Supervisor) Provide lead auditor first followed by auditor assistants along with classifications 3/20/16 Audit date(s) List nonconformances: Element 6. List of interested parties had (4) changes that need to be made to update element 6. Contact or contact info has changed since the last review. 2. 3. 4. 5. 6. Comments: Nonconformance 2016-03 was drawn up to address and get it changed / updated on ESD site and on public website. "I have conducted an internal audit of the BMP element noted above." Lead Auditor (MM/DD/YYYY)\_03\_/\_20\_/\_2016\_ signature:\_

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Joint review with BMP coordinator: (MM/DD/YYYY) 3/51/4

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## **ELEMENT 6 AUDIT REVIEW**

- retired. Replace interested party with Tom Kent with Wyoming is now Jon Burke? (4/25)
- Doug Wood at South Kent Landfill (Kent County). New phone 3 616.632.7920.
- Utility Advisory Board (UAB). Pam remove? (405) Ton Almonte replaces. Ritzema is retired. New person or <u>ო</u>
- MWEA. New Biosolids chair is now (scottk@hamlettenvironmental.com Scott Kafka (not Jeff Pugh). 517.545.2500

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Table 16.1.6 - Internal Auditor's Minimum Question Checklist

Table 16.1.6 – Internal Auditor's Minimum Question Checklist	TP 1 12 1 6 1 1 1	
Element 6 Public Participation in Planning	Record audit number from worksheet:	Auditory
Requirement	Questions/Considerations	Auditor Notes
Select and implement a proactive public participation approach to involve interested parties in its Biosolids Management Program and BMP planning process.	Is there evidence that a proactive process was selected and implemented to seek public participation near the beginning of the BMP planning process?	Yes. Element 6 of the BMP manual addresses public participation in planning. Interested parties are notified and encouraged to participate.
Reflect, in the selected approach, the organization's commitments to the ten principles in the Code of Good Practice, including a plan for independent third-party verification of conformance with the BMP Elements.	Does element 6 commit the City to the Code of Good Practice?  Does element 6 include information on the third party verification audit?	Yes. This is mentioned in the beginning parts of element 6 (pages 1 and 2) of the BMP manual.
Select an approach that is consistent with the degree of current public interest, history of public involvement, method of biosolids management, and related local circumstances.	Is the City's approach to public participation consistent with the degree of current public interest in the City's biosolids program?	Yes. There is a Public request for information form 9.1 in element 9. There is also a file with information from interested parties (Form 5.2) related to goals and goal setting in the BMP files.
Provide interested parties with meaningful opportunities to express views and perspectives relative to biosolids management activities, including concerns about environmental impacts, biosolids program performance, and potential areas for improvement.	Were opportunities provided for interested parties to provide input into the BMP? Did it include environmental impacts? Did it include biosolids program performance? Did it include potential areas for improvement?	Yes; on the website. Form 5.2 listing our goals are sent to our interested parties prior to setting the upcoming goals for the next year. Yes. Yes. Yes.
Consider input from interested parties in initially developing program goals and objectives during BMP implementation and in updating them as part of periodic review of biosolids management program performance.	Did the City consider input from interested parties when initially developing its program goals and objectives? Did the City consider input from interested parties when updating them as part of its periodic review of biosolids management program performance?	Yes. There is a "Public Participation in Planning" folder in the BMP file in the coordinator's office.  Yes. There is a folder in the BMP coordinator files with input related to goals for each year.
The City will maintain information related to the Biosolids management program and processes on the City's internet website.	Can you show the Biosolids information on your website?	Yes. It is located for public view at <a href="http://grcity.us/enterprise-services/Environment-Services/Pages/Biosolids-BMP.aspx">http://grcity.us/enterprise-services/Environment-Services/Pages/Biosolids-BMP.aspx</a> for the public and on the ESD Sharepoint site for all ESD and City personnel to view.
The City offers plant tours which can be customized to meet the needs of the group.	Can you show how information relating to Biosolids is communicated during plant tours?	Yes. Our tour presentation addresses Biosolids. Beneficial reuse and methane recovery from landfills (bio-methane reactors) are explained to tour groups as well.
Records will be maintained to document the City's responsiveness to public input and requests for information regarding the BMP.	Can you show your records in regard to public input?	Yes. In the public information requests folder in the BMP coordinator's office files.
A list of interested parties must be created.	Can you show your up to date list of interested parties?	Yes. The list is located in element 6 of the BMP. Review during 2016 internal audit noted that four interested parties either had retired, had contact or phone number changes or had new contacts. This list needs updating. Nonconformance 2016-03 was made to correct and update the list of interested parties. In addition, element 6 will need to be modified by the BMP Coordinator to correct the nonconformance.
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Auditors Worksheet	Circle one: Conformance Nonconformance		
Element No.	(7) Roles and Responsibilities	Audit Number: 07-2016-01	
Provide lead auditor first followed by auditor assistants along with classifications	Dave Harris (Wastewater O&M Supervisor) William Kaiser (WW Superintendent)		
Audit date(s)	3/25/16		
st nonconformances:			
•			
Comments: PATTY Chapman retired	as of 3/18/16. Internal tea.  Flement needs to be	m member Nicole Pasch needs to Checked out Changed	

'I have conducted an internal audit ot the BMP elemer 

Table 16.1.7 - Internal Auditor's Minimum Question Checklist

Table 16.1.7 – Internal Auditor's Minimum Question Checklist	<u> </u>	
Element 7 Roles and Responsibilities	Record audit number from worksheet:	
Requirement	Questions/Considerations	Auditor Notes
Establish and maintain records of the assigned roles and responsibilities for the Biosolids Management Program and activities. These records shall define and document roles and responsibilities of employees for performing	Can you show examples of how responsibilities have been assigned for the BMP?	Element 7 (procedures #2) defines the responsible parties of the internal BMP team and their work groups. Element 3 (Critical Control Points) identifies the CCP's and the operational controls. Tables 7.1 and 7.2 identify the responsible party for each critical control point (CCP).
biosolids management activities and BMP functions.		
Appoint an individual with overall responsibility for ensuring that Biosolids Management Program and BMP are implemented and maintained.	Has an BMP coordinator who has overall responsibility for the BMP been assigned?	Yes. Bill Kaiser assumed responsibility during the 2015 calendar year and conducted the Ninth interim audit with our outside auditor William Hancuff.
Provide the human, technical, and financial resources necessary to effectively execute these responsibilities.	Can you provide evidence of adequate staffing to carry out assigned responsibilities?  Can you provide evidence of adequate maintenance and	Yes. The organizational chart for the department is located on the ESD Sharepoint site under the BMP heading. It is also on the public website.
	instrumentation services to carry out assigned responsibilities? Can you provide evidence of adequate financial resources to effectively execute these responsibilities?	Yes. Our computerized monitoring maintenance system is tracked in Maximo.  Yes. Approved ESD and GVRBA budgets.
Define and document the roles and responsibilities of contractors retained to perform various biosolids management activities and BMP functions through Service Agreements.	Have roles and responsibilities of contractors been defined in their service agreements?	Yes. The contractor critical control points are outlined in the contract documents and bid specifications. Participation and responsibility with the BMP is a requirement of the contractor.
The organizational chart shown in Figure 7.1 shows the reporting structure in place at the Grand Rapids facility.	Is your organizational chart up to date?	Yes. The organizational chart has been updated as of the ninth interim audit. With the City's transformation efforts to be more sustainable; the organizational chart has been updated several times over the last few years.
The contractor is responsible for following policies and procedures they develop which are necessary to ensure that operations are conducted in a safe and environmentally sound manner.	Is your contractor prepared to respond to emergency situations?  Does your contractor have a safety program?	Yes. The contractor Cordes Inc has their spill plan in place. The control copy is kept in a mnual at the Cordes facility. Each driver is required to carry current SOP copies and a copy of the spill plan.
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Table 16.1 Internal Auditor's Worksheet			
<b>Auditors Worksheet</b>	Circle one: Co	onformance (Nonconformance)	Carrier Control of Con
Element No.	8 – Training	Audit Number:	08-2016-01
Provide lead auditor first followed by auditor assistants along with classifications	Lead Auditor: Dave Harris (O&M Supervisor Assistant Auditor: Nicole Pasch (EAS)	7)	
Audit date(s)	March 16, 2016 – March 29, 2016		
List nonconformances: 1. Training was not completed at 100%			
2.			
3.			
4.			
5.			
6.			
7.	·		
Comments: Although we do a good job with training that we also track the date of transfer for employed	ng staff, we did miss a couple transfer emplo ees to ensure we do not miss anyone new to	yees. As an opportunity for impro the department.	vement, it is suggested
"I have conducted an internal audit of Lead Auditor (MM/DD/YYYY) $3/29$	f the BMP element noted above." / <u>/6`</u> signature:////////////////////////////////////	Haus_	
Joint review with BMP coordinator: (MI	M/DD/YYYY) ろ/ 3)./ ル Initia	ls: W	
Element 16 - Internal EMS Audit	Page 4 of		

Table 16.1.8 - Internal Auditor's Minimum Question Checklist

Table 16.1.8 – Internal Auditor's Minimum Question Checklist	Record audit number from worksheet:	
Element 8 Training		Auditor Notes
Requirement	Questions/Considerations	
Establish and maintain a training program to ensure that employees responsible for specific biosolids management activities and for the implementation of various BMP functions are competent in performing their	Did all employees receive general awareness training? What records support this training?	No, two did not receive the training. All employees, with the exception of two transfers, at Environmental Services Department (ESD) received general awareness training.
assigned tasks and duties. The training program shall provide general awareness of the BMP and how each employee's assigned roles and responsibilities relate to the entire biosolids value chain.		Training records are kept on the internal BMP SharePoint site, maintained by the BMP Coordinator and designated trainer staff. The document is orderly and kept up to date. <u>Training List</u> The new system is a better tracking mechanism than in the past, as all staff are listed with the assistance of our payroll representative in keeping staffing notifications updated for the BMP Coordinator.
		An opportunity for improvement may be to track the date of transfer for employees to ensure we do not miss anyone new.  New employees at the ESD receive BMP Awareness Training as part of the orientation at ESD. This includes new
Include in the training program new or reassigned employees.	What actions are taken with new employees?	hires, transferred employees, and interns.
Maintain records of individual employee training delivered and completed.	What training records do you maintain?	Training records are kept on the internal BMP SharePoint site. These records include the name of all employees for the given year, Clock Numbers for the employee, date the BMP Training took place, Dept/Division, and Supervisor name.
Require that contractors establish their own training programs consistent with their roles and responsibilities in biosolids management activities as defined through Service Agreements.	What training records do you maintain?	BMP awareness training is conducted by the BMP Coordinator or their assigned delegate for all new contractors.  Trained contractors receive BMP Refresher Training annually. These records are kept in the same document as internal employees on the internal BMP SharePoint site. Training List
Maintain a training program that indicates training schedules by job classification	Is the training schedule up to date? Do the training records show that all employees have received the scheduled training?	Yes, the training schedule is up to date. No, two employees did not receive the training

Table 16.1 Internal Auditor's Worksheet			
Auditors Worksheet	Circle one: Conformance Nonconformance		
Element No.	9 - Communication and Public Outread	h Audit Number: 09-2016-01	
Provide lead auditor first followed by auditor assistants along with classifications	Lead Auditor: Dave Harris (O&M Super Assistant Auditor: Nicole Pasch (EAS)	visor)	
Audit date(s)	March 16, 2016 - March 29, 2016		
List nonconformances:			
1.			
2.	·		
3.			
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7.			
Comments: An opportunity for improvement is to the external site is to date documents based consist	fix the link to the Comment Form on our stently on program year vs. year of activ	website. Also a suggestion for document dating, especially on ity in order to be more transparent to interested parties.	
"I have conducted an internal audit of Lead Auditor (MM/DD/YYYY) 3/3/13	f the BMP element noted abov 1016 signature:	Hauis	
Joint review with BMP coordinator: (MA Element 16 - Internal EMS Audit		nitials:	

Table 16.1.9 - Internal Auditor's Minimum Question Checklist

Table 16.1.9 – Internal Auditor's Minimum Question Checklist	Dd1'1	
Element 9 Communication and Public Outreach	Record audit number from worksheet:	A. J. L. Marketter
Requirement  Establish and maintain a proactive Communications Program that provides	Questions/Considerations  How is information about the BMP communicated to employees and	Auditor Notes  Information about the BMP is communicated through BMP Training to ESD staff. BMP information is also available to
ongoing information about the Biosolids Management Program and BMP to interested parties and the public, consistent with local circumstances, the method of biosolids management, public communications history, and degree of current interest in its Biosolids management activities.	other interested parties?	all ESD and City employees on the ESD SharePoint site.  http://mygrcity.us/departments/enterpriseservices/serviceareas/ESD/pages/default.aspx Additionally, for external or internal persons, BMP information is on the City of Grand Rapids' website http://www.grcity.us/enterprise-services/Environment-Services/Pages/Biosolids-BMP.aspx Information about our BMP is also communicated during plant tours and other public outreach events staffed by ESD employees.
Include a procedure for receiving inquiries and requests for information from interested parties about its biosolids management activities and BMP. The procedure shall define a process for assuring a timely and complete response to inquiries by interested parties.	How can interested parties request information about the City's BMP? How do you assure that information is provided promptly? How do you track requests for information?	Interested parties can contact the City of Grand Rapids through the 311 Customer Service team, by dialing 3-1-1 from a Grand Rapids phone line, or 616-456-3000 from outside the City. The e-mail customerservice@grcity.us is maintained by that team. The ESD Facebook page is maintained by ESD staff and is another avenue for contacting the Department. On the website is a comment form that can be completed; however, the link is currently not working. <a href="http://www.grcity.us/enterprise-services/Environment-Services/Pages/Biosoloids-EMS-Participation-Form.aspx">http://www.grcity.us/enterprise-services/Environment-Services/Pages/Biosoloids-EMS-Participation-Form.aspx</a> The internal process for the 311 Customer Service team is to answer the request for information, submit the request into a service message workflow. The service message is responded to by ESD staff to the interested party and closed when finished. If the work is not completed within a designated time (48 hours) the service message is sent to the Manager to review with staff and ensure response is provided. Service messages are tracked in the crm software. Facebook messages are responded to during normal business hours; however, if the issue is urgent someone will respond immediately. The page has 5 or more administrators that can review and respond to messages.  The public comment/suggestion form provides an opportunity for individuals to indicate if they would like to receive future e-mails related to the ESD's BMP program. E-mails alerts are sent to the BMP Coordinator and designated staff members, notifying them a submission has been made requiring review and potentially a response.  A Public Request for Information Form, part of Element 9, is completed by the ESD employee who received the inquiry.  All Public Request for Information Forms are filed by year and retained in the BMP Coordinator's Office.
At a minimum, make the following information about the organization's Biosolids management program and activities available to interested parties:  a) the Biosolids Management Policy; b) applicable legal and other requirements; c) biosolids program goals and objectives for continual improvement; d) the periodic Biosolids Management Program Performance Report; and e) a detailed report of the independent, third party BMP verification audit results.	Is the Biosolids Management Policy available to interested parties? Are legal and other requirements available to interested parties? Are goals and objectives available to interested parties? Is the periodic biosolids management program performance report available to interested parties? Is third party audit and verification audit results available to interested parties?	The Biosolids Management Policy is available on the City's website <a href="https://www.grcity.us">www.grcity.us</a> The legal and other requirements are available to everyone on the City's website <a href="https://www.grcity.us">www.grcity.us</a> The goals and objectives are available to everyone on the City's website <a href="https://www.grcity.us">www.grcity.us</a> (through 2014) The periodic BMP Performance Reports are on the City's website <a href="https://www.grcity.us">www.grcity.us</a> (through 2014) Third Party Audits, (and Internal Audits), are on the City's website <a href="https://www.grcity.us">www.grcity.us</a> (through 2014) Third Party Audits, (and Internal Audits), are on the City's website <a href="https://www.grcity.us">www.grcity.us</a> (through 2014) Third Party Audits, (and Internal Audits), are on the City's website <a href="https://www.grcity.us">www.grcity.us</a> (through 2014) Third Party Audits, (and Internal Audits), are on the City's website <a href="https://www.grcity.us">www.grcity.us</a> (through 2014) Third Party Audits, (and Internal Audits), are on the City's website <a href="https://www.grcity.us">www.grcity.us</a> (through 2014) Third Party Audits, (and Internal Audits), are on the City's website <a href="https://www.grcity.us">www.grcity.us</a> (through 2014) Third Party Audits, (and Internal Audits), are on the City's website <a href="https://www.grcity.us">www.grcity.us</a> (through 2014) Third Party Audits, (and Internal Audits), are on the City's website <a href="https://www.grcity.us">www.grcity.us</a> (through 2014) Third Party Audits, (and Internal Audits), are on the City's website <a href="https://www.grcity.us">www.grcity.us</a> (through 2014) Third Party Audits, (and Internal Audits), are on the City's website <a href="https://www.grcity.us">www.grcity.us</a> (through 2014) Third Party Audits, (and Internal Audits), are on the City's website <a href="https://www.grcity.us">www.grcity.us</a> (through 2014) Third Party Audits, (and Internal Audits), are on the City
Define roles and responsibilities of outside contractors in the Communications Program.	Is there evidence of how contractors are to handle requests for information in element 9?	Element 9 specifies contractors are to "direct other (non-employee) requests for information to the WPS (Wastewater Plant Superintendent) who will provide a response
Communicate relevant information about biosolids management activities and the Biosolids Management Policy, and all seventeen elements of the BMP to employees and outside contractors, consistent with assigned roles and responsibilities.	Is there evidence that information about the BMP is communicated to employees and contractors?	Yes. All BMP training tracked by the BMP Coordinator is kept on the ESD SharePoint site <u>Training List</u>
Completion of Public Request for Information Form each time information is sent to the public.	Review Public Request for Information Forms completed in the last year for completeness.	Yes, there was one Public Request for Information and the form was completed.

Table 16.1 Internal Auditor's Worksheet Nonconformance Circle one: Conformance **Auditors Worksheet** 10-2016-01 10 - Operational Controls of Critical Control Audit Number: Element No. Lead Auditor: Dave Harris (O&M Supervisor) Provide lead auditor first followed by auditor Assistant Auditor: Nicole Pasch (EAS) assistants along with classifications March 16, 2016 - March 29, 2016 Audit date(s) List nonconformances: 1. 2. 3. 4. 5. 6. 7. Comments: An opportunity for improvement is to review the naming convention used in regard to the Critical Control Point being named: Septage (portable toilet) receiving and is listed in the SOP Chart as: Portable Toilet Waste. It is recommended to use the same naming convention for both. "I have conducted an internal audit of the BMP element poted above. Lead Auditor (MM/DD/YYYY) 3 / 29 / 26/6 signature: 1

Table 16.1.10 - Internal Auditor's Minimum Question Checklist

Element 10 Operational Controls of Critical Control Points	Record audit number from worksheet:	
Requirement	Questions/Considerations	Auditor Notes
Develop and implement standard operating procedures, work management practices or other appropriate methods at all critical control points throughout the biosolids value chain to effectively manage potential environmental impacts.	Have SOP's and maintenance practices been implemented at all critical control points identified in Table 3.1?  Do they effectively manage the environmental impacts listed in Table 3.1?	The maintenance practices have been implemented for all of the critical control points listed in Table 3.1.  Yes, the SOPs effectively manage the environmental impacts listed in Table 3.1 for the critical control points.  Note: Septage (portable toilet) receiving in SOP Chart as: Portable Toilet Waste
Incorporate all legal and other adopted requirements in the operational controls of critical control points.	Have legal requirements been included in operational controls (SOP's)?	Yes, the legal requirements were reviewed in 2015 and this information is in the BMP files. The lgal requirements are cross referenced in the operational controls of Table 3.1 to Table 4.1, "Legal and Other Requirements."
Consider applicable best management practices as defined in various authoritative sources on biosolids management (e.g., the National Manual of Good Practice, Water Environment Federation Manuals of Practice, etc.).	What sources were considered when developing operational controls?  Are they consistent with NBP guidance?	The sources for developing operational controls include the NBP code of good practice: MOB 11: NPDES Permit: 40 CFR Chapter 1, Parts 136, 258, and 503. State of Michigan Biosolids Laws and Regulations Parts 323.2413 and 33.2416.  Yes, they are consistent with NBP guidance.
Include appropriate preventative maintenance procedures and work management systems for maintaining equipment, instrumentation, vehicles, and other treatment technology and process control systems associated with its biosolids management activities	Is a facility maintenance management system in place? Is it functioning properly? Are records being maintained?	Yes, ESD utilizes Maximo as its maintenance management system. The current version is 7.5 and it is maintained by Projetech. Yes, Maximo is functioning properly. Yes, Records are being maintained.  Note: We are currently working on upgrading to Maximo 7.7 in calendar year 2016.
Require that contractors establish their own operational controls consistent with their roles and responsibilities in biosolids management activities.	Have contractors implemented their own operational controls for processes they are responsible for?	Yes, the (trucking) contractor has implemented their own operational controls for their work involving Critical Control Points. The controlled copy is retained in their office and copies are available in their trucks. These are checked during the quarterly contractor compliance inspections. All four quarterly inspections were completed in 2015.
Develop and implement standard operating procedures for dewatering centrifuges and other key solids processing equipment.	Have SOP's been implemented for all key solids processing equipment?	All SOPs associated with dewatering the Biosolids have been reviewed and updated if needed.

Table 16.1 Internal Auditor's Worksheet			
<b>Auditors Worksheet</b>	Circle one: Conformance Nonconformance		
Element No.	11 – emergency Preparedness & Response	Audit Number:	11-2016-01
Provide lead auditor first followed by auditor assistants along with classifications	Lead Auditor: Dave Harris (O&M Supervisor) Assistant Auditor: Nicole Pasch (EAS)		
Audit date(s)	March 16, 2016 – March 29, 2016		
List nonconformances: 1.			
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Comments: The Grand Rapids Wastewater Treatment update to reflect this change in naming.	ent Plant is now called The Grand Rapids Water	Resource Recovery Facility, the	SOP 3114 should be
"I have conducted an internal audit of Lead Auditor (MM/DD/YYYY) <u>03/39</u> /		us	
Joint review with BMP coordinator: (MA	M/DD/YYYY) <u>多ノみノル</u> Initials: <u>.</u>	Well	

Table 16.1.11 - Internal Auditor's Minimum Question Checklist

Table 16.1.11 – Internal Auditor's Minimum Question Checklist	Record audit number from worksheet:	
Element 11 Emergency Preparedness and Response		Auditor Notes
Requirement	Questions/Considerations	Yes. SOP 3114 titled "Release Containment Plan for WWTP" includes instructions pertaining to Biosolids and our BMP
Establish and maintain Emergency Preparedness and Response Plans and	Are emergency procedures in place to deal with Biosolids related	
Procedures to assure effective response to accidents and emergency	emergencies?	and are effective.
situations associated with Biosolids management activities.	Are they maintained?	Yes.
	·	Note: The Grand Rapids Wastewater Treatment Plant is now called The Grand Rapids Water Resource Recovery Facility, the SOP 3114 should be updated to reflect this change in naming.
Review and evaluate the effectiveness of emergency preparedness and	How effective are the procedures?	The current SOPs related to emergency preparedness have been reviewed, updated if necessary and considered to be
response procedures, including communications systems, and revise them as	The state of the province of the state of th	effective.
necessary.	7110	Yes, the equipment is tracked by ESD's Computer Maintenance Management System, which generates monthly PM
Have all emergency response equipment on site or readily available within a minimum response time.	Is equipment readily available?	work orders to check the equipment and quarterly PM to check pump operation. The equipment is stored in ESD's Fisher Building or the Vehicle Storage Building and readily available for use.
Require contractors to establish and maintain Emergency Preparedness and	Have contractors implemented emergency response procedures?	Yes. The contractor has a Spill Plan and all drivers keep current copies in their vehicles. Controlled copies are kept at
Response Plans and Procedures to assure effective response to accidents and	Are they maintained?	the corporate office.
Response Plans and Procedures to assure effective response to accidents and	Are mey manualieu:	Yes, the Spill Plan is maintained and reviewed quarterly by the BMP Manager or Coordinator.
emergency situations associated with biosolids management activities.		a con the open country and a content of the content
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Table 16.1 Internal Auditor's Worksheet		
Auditors Worksheet	Circle one: 🔍	Conformance Nonconformance
Element No.	12 - Documentation & Document Control	Audit Number: 12-2016-01
Provide lead auditor first followed by auditor assistants along with classifications	Lead Auditor: Dave Harris (O&M Supervise Assistant Auditor: Nicole Pasch (EAS)	or)
Audit date(s)	March 16, 2016 - March 29, 2016	
List nonconformances:		
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Comments: A suggestion for document storage wo desired information.	ould be to color code the document folders	by year in order to better organize and quickly find the
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"I have conducted an internal audit of Lead Auditor (MM/DD/YYYY)	f the BMP element noted above. 1 <u>3016</u> signature: <b>fluid</b> fr.kf	auis
Joint review with BMP coordinator: (MM) Element 16 - Internal EMS Audit	M/DD/YYYY) <u>3 /31 / 14</u> Initi Page 8 o	als:

Table 16.1.12 - Internal Auditor's Minimum Question Checklist

Table 16.1.12 – Internal Auditor's Minimum Question Checklist	Record audit number from worksheet:	
Element 12 BMP Documentation and Document Control		Auditor Notes
Requirement	Questions/Considerations	
Establish and maintain documentation, documents, and records for the	How is the BMP documented?	The BMP is available on the City's website www.grcity.us and also on the ESD SharePoint site
Biosolids Management program including the seventeen elements of its	How are records of the BMP maintained?	http://mygrcity.us/departments/enterpriseservices/serviceareas/ESD/pages/default.aspx
BMP.		The documentation is maintained on the ESD SharePoint site and the City's website.
Establish and maintain document control procedures and practices to ensure	Is there a document control procedure in place?	Yes. There is a document control procedure and it is documented in SOP #1110
that its Biosolids Management program documentation and documents are:	Are documents available and easily located?	Yes. All of the documentation is available and easily located on both the SharePoint site and City's website.
a) available and can be easily located,	Do they follow established document creation protocols?	Yes. The documentation follows established document creation protocols.
a) available and can be easily located,		Yes. The documents are kept up to date.
b) created following established document creation protocols,	Are they kept up to date?	res. The documents are kept up to date.
c) kept up to date through periodic reviews and revision (if applicable),	Are they marked with revision number?	Yes. The documents are marked with a revision number
d) properly marked with version number, effective date(s), and references	Are they marked with an effective date?	Yes. The documents are marked with an effective date
to replaced or superseded versions, and	Are they approved by authorized personnel?	Yes. The documents are approved by authorized personnel.
e) approved by authorized personnel.		
Establish and maintain records of biosolids management activities and	Are records of Biosolids management activities maintained?	Yes. The records for the Biosolids management activites are maintained and organized by the BMP Coordinator.
ensure that they are:	Are the records available and easily located?	The BMP records are organized in a file in the BMP coordinator's office in an orderly manner and filed by type of
a) available and can be easily located, and	Are the records retained for the specified period of time?	record and then by year.
	Are the records retained for the specified period of time?	Yes. The records are retained minimally according to Table 12.2
b) retained for the specified period of time		105. The records die fedanten iniminary according to rapid 12.2
Establish documentation, document control and record requirements for	Have contractors implemented document control procedures?	Yes, the contractors have implemented a document control procedure and controlled copies are retained in the
Biosolids management activities conducted by its contractors in Service	Have requirements for document control procedures been included	contractor's offices. Quarterly checks are made to verify versions are available in trucks to all drivers.
Agreements, and incorporate these requirements into its BMP for biosolids.	in service contracts?	
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Table 16.1 Internal Auditor's Worksheet`		TO BE A STATE OF LINE OF LAND	
Auditors Worksheet		nformance Nonconformance	42.2046.04
Element No.	(13) Monitoring & Measurement	Audit Number:	13-2016-01
Provide lead auditor first followed by auditor assistants along with classifications	Dave Harris (Wastewater O&M Supervisor)		
Audit date(s)	3/20/16		
List nonconformances:			
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Comments:			
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Joint review with BMP coordinator: (M Element 16 - Internal EMS Audit.2016.docx	M/DD/YYYY) <u>\$ / 3 L</u> / <u>  [</u> Initial Page 4 of 2		

## Harris, Dave

From:

Harris, Dave

Sent:

Friday, March 25, 2016 2:52 AM

To:

Konkle, Jeff Kaiser, William

Cc: Subject:

BMP (Drum Speeds at TWAS)

Jeff,

As per our discussion, we need to have the drum speeds in I-trend in order to be compliant as this is a monitoring and measurement criteria for this critical control point.

Just a reminder. This will satisfy element 3 monitoring requirements.

Thanks,

David Harris Wastewater Operations & Maintenance Supervisor City of Grand Rapids Environmental Services Dept. 616.456.3639 616.443.7784 Table 16.1.13 - Internal Auditor's Minimum Question Checklist

Table 16.1.13 – Internal Auditor's Minimum Question Checklist				
Element 13 Monitoring and Measurement				
Requirement	Questions/Considerations	Auditor Notes		
Establish and maintain regular monitoring and measurement procedures and practices for all biosolids management activities to assure compliance with applicable legal and other requirements, measure biosolids program performance at critical control points, and track progress toward achieving program goals and objectives.	Are procedures in place to conduct regular monitoring and measurement practices for all Biosolids management activities?	Yes. However, monitoring and measurement for grit and screenings states volume is recorded and tracked. With screenings, only cubic feet (volume) is entered into database. Weight only is entered for grit. Suggest that element 3 is changed to show volume for screenings and weight for grit. The vendor only provides us with weight of both; not volume. Also, drum speed is not recorded consistently on paper log at TWAS and there are 9 drums. Jeff Konkle is adding this to I-trend so that SCADA will have this data being recorded continually. This puts us in conformance and was an immediate fix.		
Record monitoring and measurement results and maintain records as established in the record keeping procedures under Element 12.	Provide examples of monitoring and measurement data?	Figure 5.1 and Table 13.1 are used for tracking of goals and objectives. Legal requirements are reviewed each year as stated in element 4. Critical control point review is done each year in July as well as the monitoring and measurement requirements. Operational controls are reviewed in October.		
Require contractors to establish and maintain regular monitoring and measurement procedures and practices for all their assigned biosolids management activities, as defined in their service agreement.	Have contractors implemented regular monitoring and measurement procedures for activities they are responsible for? Provide example data?	Yes. There is a vehicle inspection form that the contractor fills out when checking each load before leaving the dewatering facility. This ensures that Biosolids are transported safely to the landfills. Each driver has current copies of all related SOP's in regards to their critical control points in their trucks.		
Require responsible supervisor to create action plan for each objective they are assigned under element 7.	Is there an action plan for each objective? Was it created by the assigned supervisor? Has each objective been assigned to a supervisor? Are the roles of the appropriate supervisor and/or contractor spelled out in element 7, "Roles and Responsibilities"?	Yes Yes Yes		
At a minimum, each action plan must meet contain: (a) schedule, (b) milestones, (c) resources required, (d) human resources required and their responsibilities.	Does each action plan contain: (a) schedule, (b) milestones, (c) resources required, (d) human resources required and their responsibilities?	Yes. In table 13.2 for action plans.		
Appropriate Supervisor to submit a Progress Report, which will contain "Action Plan - Quarterly Progress Report" (see figure 13.1) and the "Action Plan Status Worksheet" (see figure 5.1) to the BMP coordinator within 30 days following the end of the calendar quarter for each objective.	Has a complete Progress Report been submitted within 30 days of the end of each calendar quarter for each objective? Are the roles of the appropriate supervisor and/or contractor spelled out in element 7, "Roles and Responsibilities"?	Yes. Progress reports for 2015 goals were submitted on time.  Yes. Roles are spelled out in element 7.		
Require "Action Plan – Quarterly Report" to contain activities that took place during the previous calendar quarter and any planned activities for the future.	Does "Action Plan – Quarterly Report" contain activities that took place during the previous calendar quarter and any planned activities for the future?	Yes. Reports detail the previous quarter activities and plans for the next quarter or longer periods are defined or outlined.		
Require "Action Plan Status Worksheet" to reflect any changes in the "Action Plan" as per "plan, do, check, act" policy or any other techniques used to assess performance warrant.  The document revision date shall reflect changes made in policy.	Was "Action Plan" modified appropriately per items included in "Action Plan Status Worksheet" and/or "Action Plan – Quarterly Report"?  Do the revision dates reflect what appears to be conveyed in any and all reports?	Yes. Action plans were updated. Yes		
BMP Coordinator will schedule a meeting with the appropriate supervisor following the receipt of a written progress report when issues or progress are a concern.	Is this role of the BMP coordinator included in element 7, "Roles and Responsibilities"? Were meetings scheduled by the BMP Coordinator following receipt of the written progress report?	Yes. The responsibility of the BMP Coordinator is detailed in element 7.  Yes. The BMP Coordinator reviews the progress reports quarterly using table 13.1 and figure figure 5.1 as submitted by		
		the responsible party. Internal team members are kept abreast of the status of goals by the Coordinator as required.		

Table 16.1 Internal Auditor's Worksheet`		and the second s	and the second s
Auditors Worksheet	Circle one: Conform	nance Nonconformance	
Element No.	(14) Nonconformances : Preventive and Corrective Action	Audit Number:	14-2016-01
Provide lead auditor first followed by auditor assistants along with classifications	Dave Harris (Wastewater O&M Supervisor) Carrie Rivette (Stormwater Wastewater Maintena	nce Superintendent)	
Audit date(s)	3/25/16		
st nonconformances:			
committee report form) by the internal BMP team i	ments have been met. Nonconformance # 2015-12 members. Regular meetings with the BMP team is for quick fixes, but element 14 would have to be re	mandatory and will assure the	se forms are filled ou
'I have conducted an internal audit of ead Auditor (MM/DD/YYYY)_03_/_25_	/ ; / 6 / 1 /// .	,	
Joint review with BMP coordinator: (MA Element 16 - Internal EMS Audit.2016.docx	M/DD/YYYY) <u> </u>	Well	

Table 16.1.14 - Internal Auditor's Minimum Question Checklist

tement 14 Nonconformance's: Preventive and Corrective Action Record audit number from worksheet: 14-2016-01			
Requirement	Questions/Considerations	Auditor Notes	
Develop and implement a procedure to investigate any noncompliance with applicable regulatory requirements and/or nonconformance with internal BMP procedures identified during routine monitoring and measurement or periodic internal BMP audits.	Show me the procedure you use to respond to nonconformance incidents?	Procedures in element 14 with table 14.2 consists of an investigation as to why the nonconformance happened and the root cause of it. The form steers the investigation crew or internal team to come up with a corrective action plan using this table 14.2 and figure 14.1 (the corrective action plan) to correct nonconformances.	
Develop and implement a procedure to identify the cause and take actions to correct the nonconformance.	What process is used to correct the nonconformance?	Table 14.2 consists of an investigation by an internal teaem, the internal BMP Team or the BMP Coordinator. This form is filled out and a corrective action plan results from the investigation. Plant staff has on occasion just used form 14.1 to correct nonconformances that are quickly fixed. We were told during our audit that form 14.2 should be filled out as well for all nonconformances. It would be possible to rewrite element 14 to allow for quick fixes to be taken care of without an investigation committee; thus bypassing form 14.2. This may be a topic of discussion with our external auditor at the next recertification audit in the fall of 2016.	
Develop and implement a procedure to document the necessary corrective actions taken to prevent a recurrence.	How is nonconformance data tracked?	Nonconformance forms are kept in a file lableled with the current year. During our seventh interim audit, an appendix in the form of a word document in the BMP manual in Sharepoint was created. This appendix has been used since 2014 in the ESD Sharepoint site. It is updated as new nonconformances are identified and again when corrective actions have been completed. It is effective in keeping track of our nonconformance statuses.	
Develop corrective action plans to address non-conformances identified during routine monitoring and measurement and identify the nonconformance, the root cause(s), and the corrective action being taken. In the corrective action plans, identify changes to policies, programs, plans, operational controls and monitoring/measurement procedures to prevent future non-conformances.	Is a corrective action plan system in place? How does it work?	Yes. figure 14.1 and table 14.2 are used. Item #6 in element 14 explains how this works.	
Establish formal corrective action plans to address finding of internal BMP audits and audits conducted by third parties. Document corrective action plans and describe what actions will be taken to address the audit findings, the individuals responsible, the estimated completion date, and required resources to develop and implement corrective and preventive action. Include recommended changes to policies, programs, plans, operational controls and monitoring/measurement procedures to prevent future non-conformances. Document these changes in the corrective action plan and in the BMP Manual and other relevant BMP documentation.	Is a corrective action.plan system in place? How does it work?	As with last year's audit, it is recommended to combine this question with the previous question. Same as previous question. Figures 14.1 and table 14.2 are used. See answer above on how corrective action plan system works.	
Track progress in completing the corrective actions and periodically update to reflect completion.	How is progress tracked?	Table 14.2 states the the committee chair is responsible for seeing the nonconformance through with oversight from the BMP Coordinator.	
(If a non-conformance has been identified) The non-conformance investigating committee will normally be given 5 days to conduct their investigation. The committee chair may request additional time by submitting a request to the BMP Coordinator.	(If a non-conformance has been identified) Was the non-conformance investigation completed in 5 days? If not, was a written request for a time extension given to the BMP Coordinator?	Normally, they are. There are occasions where the needs of service and all needed parties cannot meet on a particular incident. Someone may be on vacation or sick. Arrangements are made to conduct the investigation as soon as possible After our ninth interim audit, we were given up to 30 days to submit CAP's with the approval of our auditor.	
(If a non-conformance has been identified) The preliminary non- conformance report shall include the date the non-conformance occurred, all committee meeting dates, personnel interviewed and date interview took place, root cause analysis report, supporting documentation, recommended corrective action, recommended system changes, other observations and date corrective actions took place.	(If a non-conformance has been identified) Are all of the criteria included in the report? Are all recommended changes incorporated in the appropriate policies and/or elements? Is committee chairs responsibilities outlined in "Role and Responsibilities" (element 7)?	Yes. All necessary criteria are noted.  If needed, the BMP Manual or SOP's are changed as needed.  Yes. Element 7 outlines responsibilities.	
The BMP Coordinator will review the findings of the committee, include summery information in the Biosolids Program Performance, report and review same with the Department Director during the last quarter of the calendar year. Any non-conformance issues will be resolved within 2 weeks or as soon as practical.	How is the BMP Coordinators review of the report with the committee and subsequent review with the Department Director documented? Was a summary of the non-conformance report included in the Biosolids Program Performance Report? Were the non-conformances resolved within the desired time frame? Were any affected training programs modified? Did retraining take place as needed? Are responsibilities outlines in "Roles and Responsibilities" (element 7)?	Documentation of meeting with BMP coordinator is documented in table 14.2 in the investigation report form. Nonconformances are reviewed with the ESD Manager yearly in the periodic performance review in element 15 and 17. Yes. A summary of the nonconformances from the internal audit and any external audit from the previous year were detailed in the performance report.  Most nonconformances were resolved in a reasonable amount of time; but there is room for improvement.  No. No retraining was needed. Training was consistent in 2015.  Yes. Element 7 outlines roles and responsibilities.	

<b>Auditors Worksheet</b>	Circle one: Co	nformance Nonconformance	
Element No.	(15) Periodic Biosolids Performance Monitoring Report	Audit Number:	15-2016-01
Provide lead auditor first followed by auditor assistants along with classifications	Dave Harris (Wastewater O&M Supervisor), Superintendent)	Carrie Rivette (Wastewater/Stormwa	ater Maintenanc
Audit date(s)	3/28/16		
ist nonconformances:			
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Joint review with BMP coordinator: (MA	M/DD/YYYY) <u>3 / 3 / //</u> Initial		
Element 16 - Internal.BMPAudit.Carrie.Work	ingCopy.2016	Page 4 of 22	

Table 16.1.15 – Internal Auditor's Minimum Question Checklist

Table 16.1.15 – Internal Auditor's Minimum Question Checklist		
Element 15 Periodic Biosolids Program Performance Report	Record audit number from worksheet: 1	5-2016-01
Requirement	Questions/Considerations	Auditor Notes
Complete a periodic written Biosolids Management Program Performance	Has a Biosolids management program performance report been	Yes. The first version of the report summarizing the 2014 activities was published on March 1, 2015. Report could not
Report (at least annually), summarizing the performance of the biosolids	completed?	be done prior to that due to Nonconformances 2015-1 through 2015-3.
management program. The report shall contain appropriate summaries of	If so, review for inclusion of requirements.	
monitoring, measurements data collected as part of the action plans and other	•	Yes, all required elements and the third party audit summary are included in the Biosolids Program Performance Report
results that demonstrate the performance of the biosolids program relative to	Does it include a summary of third party or interim audit?	for 2014.
its goals, objectives and legal requirements, including those biosolids	• • •	
management activities conducted by contractors. The report shall also		
provide summaries of performance relative to other voluntary adopted		
requirements, the organization's progress toward achieving its Biosolids	·	
program goals and objectives, and a summary of its independent third party		
BMP verification audit results.	·	
Make the periodic Biosolids Management Program Report available to	Has the report been made available to employees, contractors,	Yes, the report has been published on the City of Grand Rapids public website as well as the SharePoint site for ESD
employees, contractors, interested parties and the public. The organization	interested parties and the public?	employees.
shall have the flexibility of using other methods, including electronic	F	
methods such as a biosolids program web page, in addition to or in lieu of a		
written periodic performance report.		
The Biosolids Management Program Report will take place annually in the	Was the Biosolids Management Program Report written during the	Yes,
first quarter of the year. The Biosolids Management Program Report shall be	first quarter of the year?	^
performed by the BMP Coordinator with assistance from the BMP internal	, , , , , , , , , , , , , , , , , , ,	
team.		
The Biosolids Management Program Report will be reviewed by the	Was the Biosolids Management Program Report reviewed during the	Yes. ESD Manager reviewed 3/30/2015. Form 17.1 was signed by ESD Manager on 4/10/2015.
department director as part of the periodic management review during the	first quarter of the year during the periodic management review?	166. 265 Manager 16716466 3/56/2613. Total 17.1 was signed by ESD Manager on 4/10/2013.
first quarter of the year.	and quality of the join during the periodic management to them.	
The final Biosolids Management Program Report shall be issued during the	Was the final Biosolids Management Program Report issued during	Yes. However, modifications to wastewater collection and pre-treatment sections were noted later and an additional
first quarter of the year.	the first quarter of the year?	version was published on 10/11/2015.
institution of the Jean.	the first quarter of the year.	voision was paonished on 10/11/2013.

Auditors Worksheet	Circle one: Confo	ormance Nonconformance	\$12.00 pt.
Element No.	(16) Internal BMP Audit	Audit Number:	16-2016-01
Provide lead auditor first followed by auditor assistants along with classifications	Dave Harris (Wastewater O&M Supervisor) Carrie Rivette (Stormwater Wastewater Mainte	nance Superintendent)	
Audit date(s)	3/29/16		
t nonconformances:			
omments: Element 16 require m	ents have been met.	:	
have conducted an internal audit of ead Auditor (MM/DD/YYYY)_03_/_29_,	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	aus	
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Table 16.1.16 - Internal Auditor's Minimum Ouestion Checklist

Table 16.1.16 – Internal Auditor's Minimum Question Checklist		
Element 16 Internal BMP Audit	Record audit number from worksheet: 1	6-2006-01
Requirement	Questions/Considerations	Auditor Notes
Establish and maintain an internal audit program to periodically analyze the	Has an internal audit program been implemented?	Yes, This is addressed in element 16.
BMP for biosolids and determine whether it is effectively meeting its	- "	
biosolids management policy, program requirements and biosolids program	How are findings communicated?	BMP Training, nonconformances, ESD Sharepoint, the City website, the internal audits, external audits and
goals and objectives. The internal BMP audit program shall define the scope,		management review of performance.
frequency, and methodology of the audits, assign responsibility for	Does it include contractor activities?	· ·
conducting the audits and communicating their findings, and designate		Yes, contractor activities are reviewed as they pertain to each particular element of the BMP Manual.
individuals to whom these findings are to be conveyed. The internal audit		
shall also evaluate the organization's performance relative to established		
biosolids program goals, objectives and performance measures. The internal		
BMP audit program shall cover all the organization's biosolids management		
program activities including those performed by contractors.		
Report internal BMP audit results to the organization's management in a way	Is there a system in place to respond to issues identified during the	Yes. If the requirements of elements are not met, any varances are included on form 16.1 as a reporting requirement of
that they can take action to make necessary modifications to the BMP and	internal audit process?	element 16. If issues result, then nonconformance paperwork is generated.
biosolids management program. The person responsible for the biosolids	·	
management program shall develop, or delegate the development of, a		,
comprehensive corrective action plan addressing each nonconformance		
identified by the internal audit.		
Maintain, at a minimum, the following documents and records, as applicable,	Is the audit methodology identified?	Yes. The body of element 16.
relating to its audit program:	Is the audit schedule identified?	Yes. Figure 7.2 (Schedule of Annual Biosolids Activities) in element 7.
a) description of audit methodology, protocol, scope, and schedule;	Is the lead auditor identified?	
b) identification of lead auditor(s), qualifications, and description of roles	Are corrective action plans issued for non-conformances?	Yes, lead auditors and auditor assistants are identified in form 16.1.
and responsibilities of auditors, management representatives, and others		
that may participate in, review, or be expected to act upon the audit; and		Yes, Element 14 explains this procedure.
c) Corrective and/or preventive action plans prepared resulting from an		
audit, and any related changes made to policies, plans, procedures, and		
work practices that occur as a result of an audit's findings, evaluation, or		
follow-up actions.		V. On the second
Internal audit will be conducted annually during the first quarter of the	Has the internal audit been completed during the first quarter of the	Yes. The internal audit for 2014 activities was completed in the first quarter of 2015.
calendar year.	calendar year?	
P. I. I. C.I. C. T. IDIGO. III. III. C. IV.	T III C'A LA COMPA	V. Linda D. W. D. W. D. G. C. Linda D. W. C. C. Linda D. W. C. C. Linda D. W. C.
Each member of the City Internal BMP team will be responsible for auditing	Have all elements been assigned to a City Internal BMP team member? Are those responsibilities reflected in "Roles and	Yes. Internal team members Dave Harris and Patty Chapman performed the internal audit in the first quarter of 2015 for
selected elements of the BMP. Internal BMP team members may assign		the 2014 calanedar year.
responsibility to staff within their scope of authority once they have been trained as auditors.	Responsibilities" (element 7)? If team members have assigned responsibility to other staff members, have those persons been	Yes. New members of the internal team are currently being trained in 2016 for the audit of 2015. The internal team has had some restructuring due to retirements.
trained as auditors.	trained as auditors?	Yes. If other ESD staff participate; they do so under the oversight of a lead auditor as per element 16 requirements.
Each internal auditor will be trained and provided with an internal auditor's	Were the auditors provided with an internal auditor's worksheet	Yes. The auditors worksheet states the requirements needed for the internal audit.
worksheet along with the minimum conformance requirements.	along with the minimum conformance requirements?	1 cs. The auditors worksheet states the requirements needed for the internal audit.
worksheet along with the minimum conformance requirements.	along with the minimum conformance requirements?	

Table 16.1 Internal Auditor's Worksheet			and the state of the
Auditors Worksheet	Circle one: Conformance Nonconformance		
Element No.	(17) Periodic Management re Performance	AdditiNdiffbei	1/- 2016 01
Provide lead auditor first followed by auditor assistants along with classifications	Dave Harris (Wastewater O&M Sup Superintendent)	pervisor), Carrie Rivette (Wastewater	/Stormwater Maintenance
Audit date(s)	3/28/16		
List nonconformances:			
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Joint review with BMP coordinator: (MA	M/DD/YYYY) <u>3 13/ 1</u> /4	Initials:	
Element 16 - Internal.BMPAudit.Carrie.Worki		Page 5 of 22	

Table 16.1.17 - Internal Auditor's Minimum Question Checklist

Table 16.1.17 – Internal Auditor's Minimum Question Checklist		
Element 17 Periodic Management Review of Performance	Record audit number from worksheet: 1	
Requirement	Questions/Considerations	Auditor Notes
At intervals the management determines appropriate, review the BMP and its	Are management reviews conducted?	Yes, management reviews are conducted.
performance relative to policy commitments, goals, objectives and	At what frequency?	
established performance measures to ensure its continuing stability,	What is covered during the management review?	Each year by the end of the first quarter.
adequacy and effectiveness. The management review shall address the	Is the management review documented?	•
possible need for changes to policy, the goals and objectives, the Biosolids		Goals from previous years, goals from current year, review of internal and external audit results and progress made on
management program and other BMP elements based on internal BMP audit	•	previous year goals. Nonconformances and corrective actions taken to correct. Review of the BMP policy and its
results, external verification BMP audits by third parties, changing		effectiveness.
circumstances, and the commitment to continual improvement. The		
management review shall be documented. Any changes to policies, plans,		Yes, management review is documented in Table 17.1 any sheets that may accompany that table. This is kept in the
procedures and work practices that are made as a result of the review shall	_	BMP files.
also be documented.		
Maintain, at a minimum, the following related to its management reviews:	Is the scope of what will be reviewed during the management review	Yes, this is documented in Element 17. The Biosolids Program Performance Report is reviewed as well as other items
a) schedule and scope for review;	identified?	listed in Element 17 and on Table 17.1.
b) documentation of findings, evaluation, and follow-up actions; and	How are findings documented?	instead in Exement 17 and on Table 17.1.
c) documentation of changes to policies, plans, procedures, practices and	How is input from the management review responded to?	Findings are documented in Table 17.1 along with any other additional or follow-up information needed.
other BMP elements that occur as a result of the management review	How is input from the management review responded to:	Findings are documented in Table 17.1 along with any other additional or follow-up information needed.
findings, evaluation, or follow-up actions.		
Assign a lead person or persons to be responsible for organizing and	Has an individual been assigned lead responsibility for conducting	Yes, see Figure 7.2 in Element 7.
conducting the review.	the management review?	res, see rigure 7.2 in Element 7.
conducting the review.	the management review?	
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